

Bravo 20

HIGH PERFORMANCE MULTI-PURPOSE SPEAKER

Specifications

Frequency Range (±3dB):	80Hz to 20kHz
Recommended Amplifier Power:	15–125 watts
Nominal Impedance:	8 ohms
Sensitivity 85dB [SPL/2.8v at 1m]:	89dB
Woofer:	4½" (115mm) copolymer
Tweeter:	1" (25mm) VR® aluminum dome with AMD
Crossover Frequency	2500Hz
Dimensions: (H x W x D) with corner fillers without corner fillers	14¼ x 6½ x 5¼" (362 x 166 x 134mm) 14¼ x 6½ x 4¼" (362 x 166 x 108mm)
Weight:	5 lbs (2.25kg)
Finish:	White or black, textured ABS with matching metal grille

Introduction

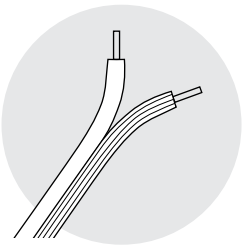
Thank you for choosing Boston Acoustics. The Boston Bravo® 20 is a multi-purpose, high performance compact loudspeaker. The Bravo 20, which uses Boston's patented one-inch aluminum dome VR® tweeter with AMD and a 4½-inch woofer, can be combined with its supplied mounting bracket or rear stand to be mounted or placed virtually anywhere in any room.

How to Connect Your Speakers

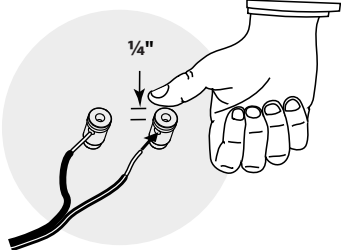
Correctly wiring your speakers is important for achieving the best sound quality. Wiring should take just a few minutes, but it's important to do it carefully, since incorrect wiring (such as reversed connections) can result in a poor soundstage and poor bass.

We recommend 18-gauge wire or thicker for runs up to 15 feet (4.5m), and 16-gauge wire or thicker for longer runs. Separate the first few inches of the wire conductors. Strip off ½-inch (12mm) of insulation from the ends of each speaker wire to expose the two conductors and tightly twist the wire strands.

WARNING: To prevent electrical shock hazard, always switch off the amplifier or receiver when making connections to the speaker.



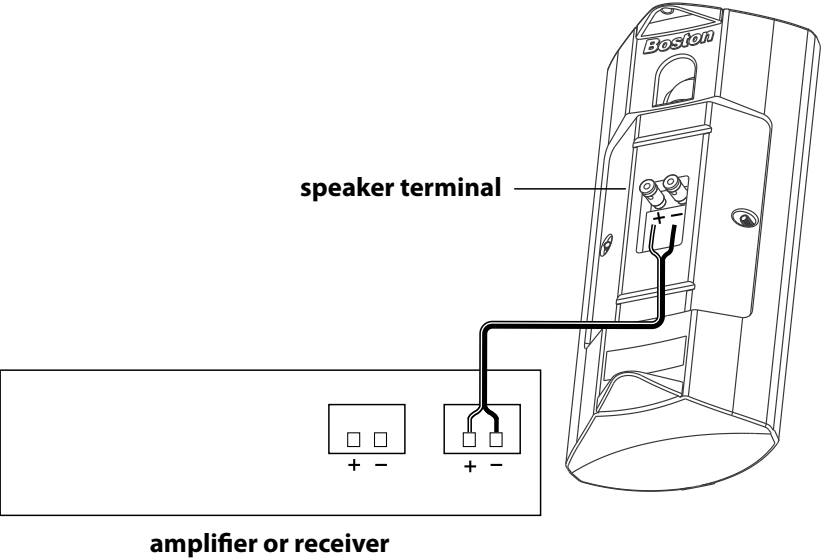
IMPORTANT: Typically, one side of the wire is smooth. Connect this side to the – (black) connection. The other side has a rib or stripe. Connect this to the + (red) connection.



Using the spring terminal posts: The spring terminal posts permit easy connection to banana plugs, spade lugs, and bare wire. Push the the top of the terminal down by approximately ¼-inch, exposing the hole. Insert the wire in the hole and release the terminal.

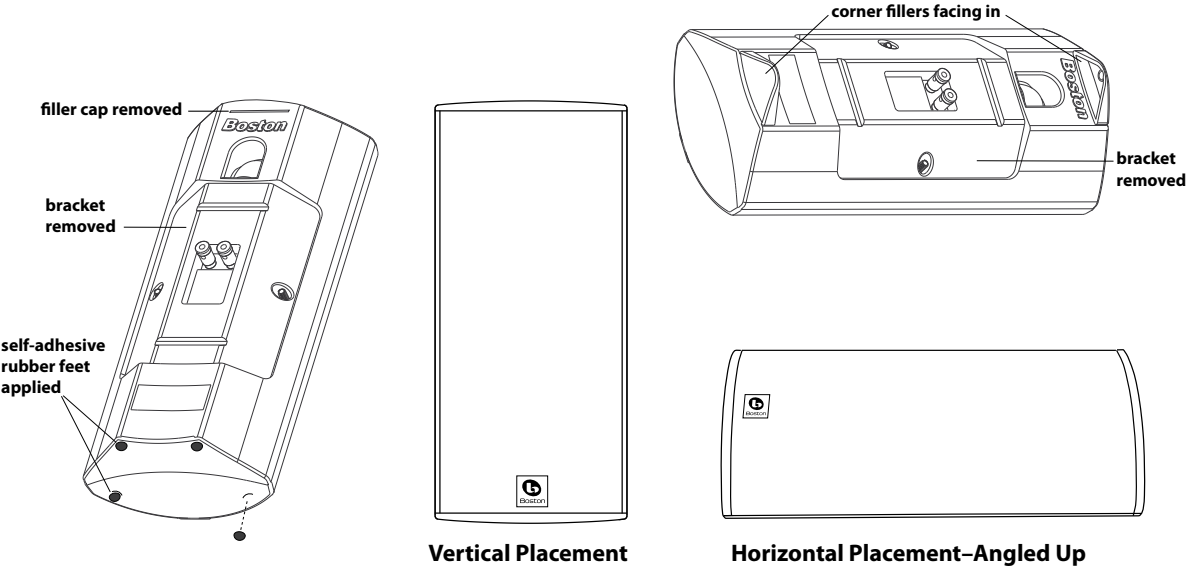
Connecting the Boston Bravo to Your Amplifier or Receiver

1. Connect the speaker terminals to the amplifier speaker outputs.
2. Make sure the speaker cable is correctly routed through the mounting bracket. (see Mounting Options)
3. When making all connections, be sure to connect + to + (red) and – to – (black).
4. If using the Bravo 20 with a subwoofer, set the receiver's bass management to SMALL in the speaker setup menu. This will divert very low frequencies away from the center channel to the main speakers and/or subwoofer.



Using the Bravo 20 on a Flat Surface

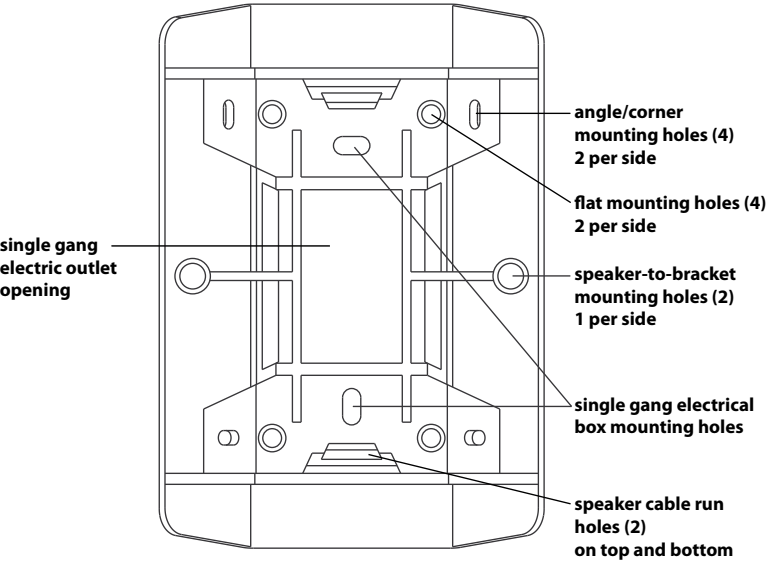
The Bravo 20 can be used on a flat surface, such as a table, shelf or the floor. For horizontal placement that angles up at 45°, both corner fillers must be used and the bracket must be removed. For untilted horizontal placement, the rear stand must be used with the mounting bracket attached (see “Mount the Speaker to the Bracket” and the “Rear Stand Installation Instructions” found on page 6. For vertical applications mount the four supplied rubber feet to the bottom of the speaker. Attach two of the supplied self-adhesive rubber feet so that its edge contacts the back edge of the cabinet. Apply two more self-adhesive rubber feet to the recesses at the front of the cabinet.



Mounting the Bravo 20

Identify the Bracket

In its packing material, the Bravo 20's mounting bracket is fitted into the back of the speaker. Remove the tape that is temporarily holding the bracket to the speaker, and then pull the bracket away from the back of the speaker. Determine how the Bravo 20 is to be mounted to the wall or ceiling. It can be mounted either horizontally or vertically, either on an open section of wall, or where two or three room surfaces meet. Refer to the illustration here to determine what screw holes on the Bravo 20 bracket should be used for your application.

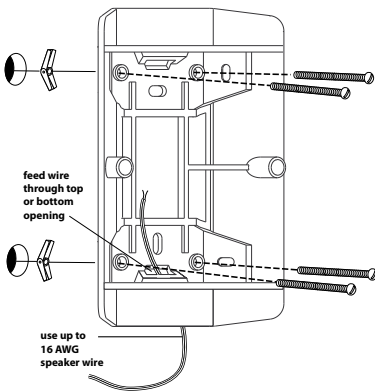


NOTE: The large rectangular hole in the middle of the bracket will fit a single gang electrical outlet to route the speaker wire through a conduit.

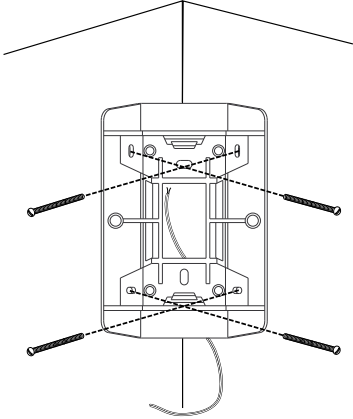
Mount the Bracket to the Wall

Decide where to mount bracket.
IMPORTANT: See “Ceiling Clearance” on page 6.
Determine what mounting holes in the bracket will be used.
Mark the holes on the wall or ceiling using bracket as a template.

Drill the holes using the appropriate drill bit size to accommodate the mounting hardware that you plan to use (ie, 1/2-inch diameter to clear the toggle bolts for hollow surfaces or small enough to allow self-tapping screws in a solid surface).
Mount the bracket flat or into a corner as shown below. We recommend the use of four fasteners wherever possible. Consult a knowledgeable installer regarding the proper hardware to use on your wall.
Strip the speaker wires ends, and feed the speaker wire through the appropriate bracket opening.
Connect the wire to the speaker's terminals, taking care to maintain speaker polarity. (See “How to Connect Your Speakers” on page 2). Both the Bravo 20 and its bracket are symmetrical, so the speaker can be mounted with either its woofer or tweeter on top. In general, bass performance will be enhanced with the woofer as close to as many room surfaces as possible.



Flat Mount Example

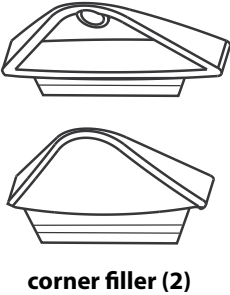


Corner Mount Example

Corner Fillers

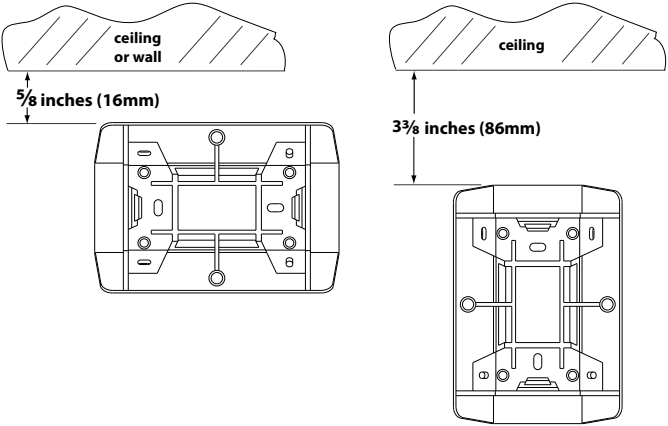
If the Bravo 20 is being mounted in a corner, then one or both of the supplied corner fillers may be inserted into the slots on the back of the speaker. These accessories will enhance the appearance of the installation by making it appear that the back of Bravo 20 extends into the corner.

NOTE: Up to 16-gauge speaker wire will fit between the fillers and the corner.



Ceiling Clearance

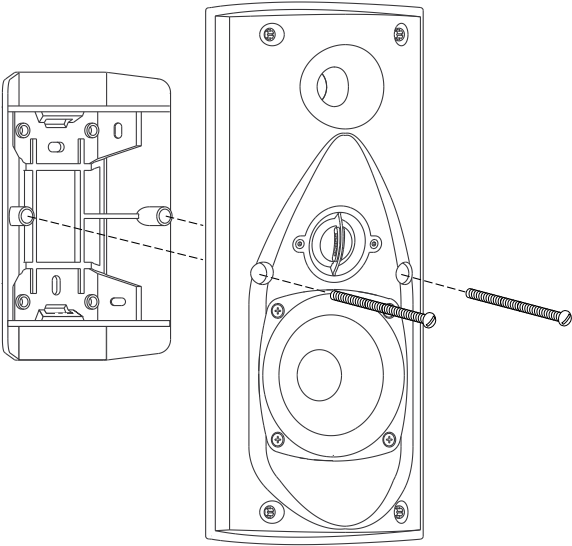
If the Bravo 20 is to be mounted so that the top or the side of the speaker will meet a flush surface, either a wall (horizontally) or the ceiling (vertically), then measure the exact distance as shown here from that surface to the top or side of the bracket.



Mount the Speaker to the Bracket

Remove the speaker's grille by grasping the back of the cabinet in one hand, while gently pulling the grille away with the other hand.
Align the openings in the back of the speaker with the two posts protruding from the bracket as shown below.
Gently remove any slack in the speaker wire as you push the speaker firmly onto the bracket.
Attach the speaker to the bracket by inserting the supplied screws through the holes in the front of the speaker and into the bracket as shown below (do not over-tighten the screws).
Replace the grille on the speaker.

NOTE: The Bravo 20 is not securely attached to its bracket unless the screws are used.



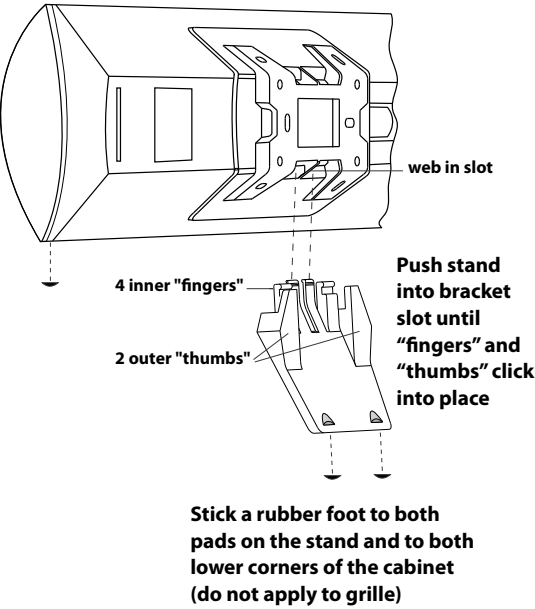
Rear Stand Installation Instructions

The Boston Bravo 20 can be used horizontally on an untilted flat surface, such as a table, shelf or the top of a rear projection TV using the included rear bracket stand.

First mount the speaker to the bracket (see above).

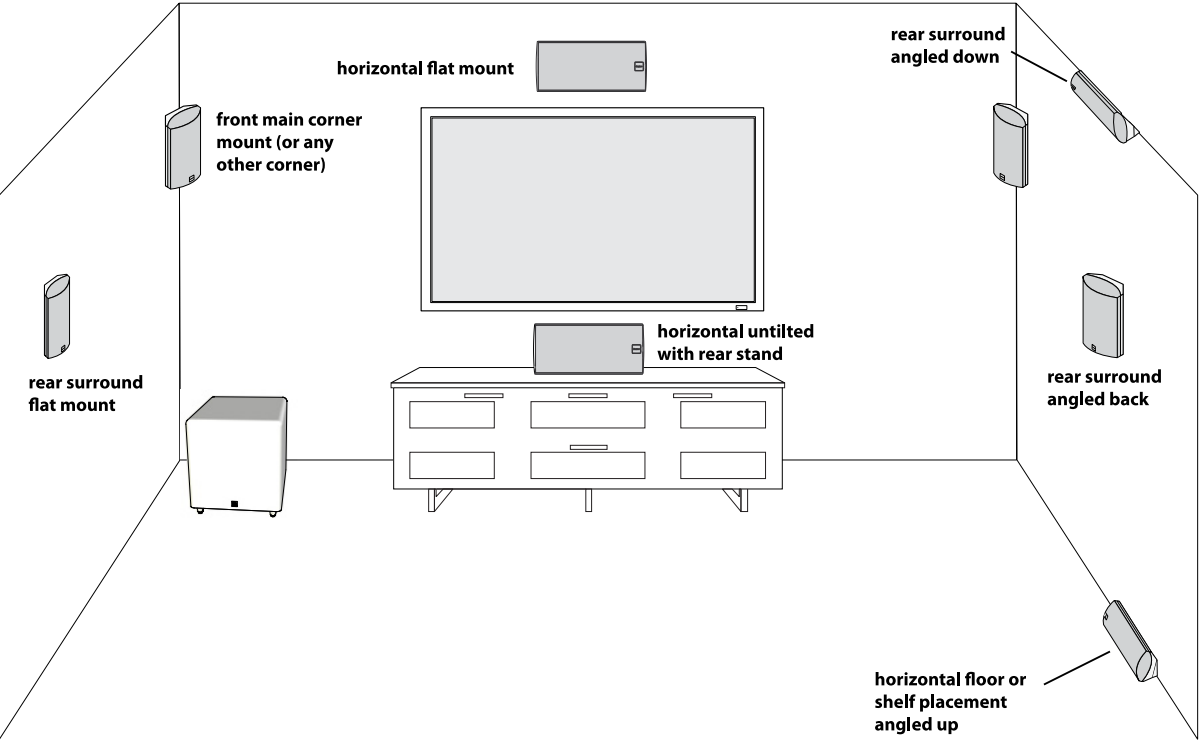
Next, place the speaker in the location that you intend to use it in (ie, correct grille/logo and tweeter/woofer orientation). Hold the stand in an upright position as indicated (note that the stand angles away from the bracket). Line up the stand with the lower slot in the bracket so that the 2 middle “fingers” are on either side of the web that bisects the slot. Slightly angle the stand away from the bracket and push the stand fingers up into the slot so that the 4 inner “fingers” are placed inside the slot and the 2 outer “thumbs” are placed outside the slot. Gently push the stand up into the bracket slot until the “fingers” and “thumbs” snap into place.

Attach the rubber feet to the stand and cabinet (detailed on page 4).



Mounting Possibilities of the Bravo 20

We designed the Bravo 20 to be mounted or placed in a wide variety of configurations. Shown below are seven of the most common possibilities for you to consider.



Rotating the Logo for Horizontal Mounting or Placement

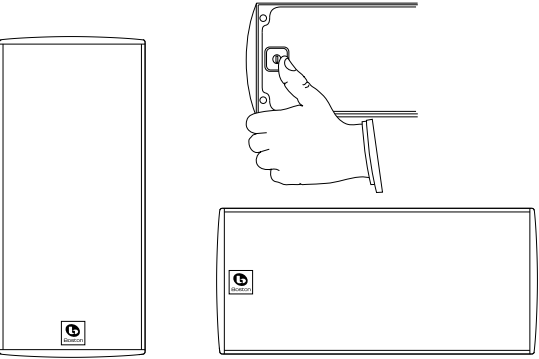
The logo plate on the Bravo 20’s grille can be rotated 90° in either direction to enhance the speaker’s appearance when mounting or placing it in a horizontal position. To rotate the logo:

Remove the grille and turn it over.

Locate the logo’s spring loaded post protruding through the bottom inside portion of the grille.

Place your thumb against the post and press firmly until the logo pops forward.

Rotate the logo to the desired position and release pressure on the post allowing it to snap back into the seated position.



Listening Levels and Power Handling

The listed power recommendations in the Specifications section assume you will operate your system in a way that will not produce distortion. Even these rugged speakers can be damaged by a modest amplifier if it produces distortion. If you hear a harsh, gritty noise, turn down the volume. Prolonged or repeated operation of your speaker with a distorted signal from the amplifier can cause damage that is not covered by the warranty.

Limited Warranty

Boston Acoustics warrants to the original purchaser of our passive loudspeakers that they will be free of defects in materials and workmanship for a period of 5 years from the date of purchase. Your responsibilities are to install and use them according to the instructions supplied, to provide safe and secure transportation to an authorized Boston Acoustics service representative, and to present proof of purchase in the form of your sales slip when requesting service. Excluded from this warranty is damage that results from abuse, misuse, improper installation, accidents, shipping, or repairs/modifications by anyone other than an authorized Boston Acoustics service representative. This warranty is limited to the Boston Acoustics product and does not cover damage to any associated equipment. This warranty does not cover the cost of removal or reinstallation. This warranty is void if the serial number has been removed or defaced. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

If Service Seems Necessary

United States

First, contact the dealer from whom you purchased the product. If that is not possible, send an email to: support@bostona.com or write to:
Boston Acoustics, Inc.
100 Corporate Drive
Mahwah, NJ 07490 USA

Canada

First, contact the dealer from whom you purchased the product. If that is not possible, send an email to: support@dmcanada.ca or write to:
D&M Canada
5-505 Apple Creek Blvd
Markham, ON L3R 5B1

All Other Countries

Contact the dealer from whom you purchased the product or contact your local distributor. For more information, please visit bostonacoustics.com/support



300 Jubilee Drive, Peabody, MA 01960 USA
www.bostonacoustics.com

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